

Appointment Scheduling

by

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abstract goes here.....

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Acknowledgements

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Co-Authorship Statement

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1 Introduction

We begin with motivation and introduction of the appointment scheduling problem in Section 1.1.....

1.1 Motivation and Appointment Scheduling

Healthcare is one of the biggest industries in North America.....in 2006..... [1].

1.1.1 Chapter 2: Appointment Scheduling with Discrete Random Durations

In Chapter 2, we study.....

1.2 Bibliography

- [1] Mike Carter. Diagnosis: Mismanagement of resources. *OR/MS Today*, 29(2):26–32, 2002.

2 Appointment Scheduling with Discrete Random Durations¹

We consider

2.1 Introduction and Motivation²

Our research concerns appointment scheduling of jobs on

2.2 Related Literature

There are many studies

Sabria and Daganzo [2] consider scheduling of arrivals of container vessels at a seaport.
Weiss [3]

2.3 Assumptions and Notation

There are $n + 1$ jobs

Figure 2.1

.....

2.4 Current Work, Future Work and Conclusion

After developing our

In another study, Appendix A.....

¹A version of this chapter has been submitted for

²A conference version of this chapter appeared in [1].

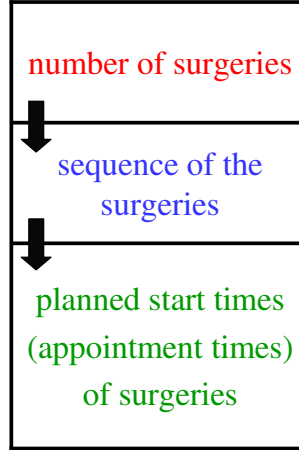


Figure 2.1: Surgery

2.5 Bibliography

- [1] Mehmet A. Begen and Maurice Queyranne. Appointment scheduling with discrete random durations. *Proceedings of the 20th Annual ACM - SIAM Symposium on Discrete Algorithms.*, pages 845 – 854, 2009.
- [2] F Sabria and C F Daganzo. Approximate expressions for queuing systems with scheduling arrivals and established service order. *Transportation Science*, 23:159–165, 1989.
- [3] E N Weiss. Models for determining estimated start times and case orderings in hospital operating rooms. *IIE Transactions*, 22(2):143–150, 1990.

3 Concluding Remarks

In this thesis, we take a in-depth look at the appointment scheduling problem [1, 2]. In Chapter 2, we

3.1 Bibliography

- [1] Tugba Cayirli and Emre Veral. Outpatient scheduling in health care: A review of literature. *Production and Operations Management*, 12(4), 2003.
- [2] P Patrick Wang. Static and dynamic scheduling of customer arrivals to a single-server system. *Naval Research Logistics*, 40(3):345–360, 1993.

A Minimizing a Discrete-Convex Function for Appointment Scheduling¹

We consider the appointment scheduling problem with discrete random durations studied in Chapter 2.....

Definition A.0.1. (*Single Period*) *Newsvendor Problem* [1] A newsvendor needs to decide the number of units

.....

probabilities in Table A.1. These numbers.....

Table A.1: Estimates of						
Operating...						
A	B	C	D	E	F	G
0.91	0.95	0.97	0.77	0.75	0.93	0.91

A.1 Conclusion and Future Work

In this chapter,.....

¹A version of this chapter will be submitted for publication.....

A.2 Bibliography

- [1] Marcelo Olivares, Christian Terwiesh, and Lydia Cassorla. Structural estimation of the newsvendor model: An application to reserving operating room time. *Management Science*, 54(1):41–55, 2008.